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1992-234417 [28]

Related Acc. Nbrs:

1992-234418

Sec. Acc. CPI:

C1992-105710

Sec. Acc. Non-CPI:

N1992-178461

Title:

Distillation appts. with condensation bags - have upper and lower honeycomb strips for even distribution and collection of liquids and vapours

Derwent Classes:

D15 F09 J01 Q78

Patent Assignee:

(AQUA-) AQUAMAX OY

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Nbr of Patents:

25

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47

Patent Number:

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AP: 1991WO-FI00388 19911216

DSNW: AU BB BG BR CA HU JP KP KR LK MG MW NO RO SD SU US

DSRW: AT BE BF BJ CF CG CH CI CM DE DK ES FR GA GB GN GR IT LU MC ML MR NL

SE SN TD TG

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AP: 1990FI-0006170 19901214

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FD: Based on WO9210264

AP: 1991AU-0090483 19911216; 1991WO-FI00388 19911216

AU9190663 A 19920708 DW1992-41 B01D-001/22

FD: Based on WO9210265

AP: 1991AU-0090663 19911216; 1991WO-FI00389 19911216

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AP: 1991WO-FI00388 19911216; 1993NO-0002177 19930614

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FD: Based on WO9210264

AP: 1991BR-0007227 19911216; 1991WO-FI00388 19911216

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FD: Based on WO9210265

AP: 1991BR-0007228 19911216; 1991WO-FI00389 19911216

JP06503265 W 19940414 DW1994-20 B01D-001/00 6p

FD: Based on WO9210265

AP: 1991WO-FI00389 19911216; 1992JP-0501682 19911216

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FD: Based on WO9210264

AP: 1991WO-FI00388 19911216; 1992JP-0502093 19911216

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FD: Previous Publ. AU9190483; Based on WO9210264

AP: 1991AU-0090483 19911216

HUT066707 T 19941228 DW1995-06 B01D-001/22

FD: Based on WO9210264

AP: 1991WO-FI00388 19911216; 1993HU-0001727 19911216

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FD: Based on WO9210264

AP: 1991WO-FI00388 19911216; 1992EP-0900876 19911216

DSR: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

NO-180519 B 19970127 DW1997-11 B01D-001/22

FD: Previous Publ. NO9302178

AP: 1991WO-FI00389 19911216; 1993NO-0002178 19930614

EP-639097 B1 19970312 DW1997-15 B01D-001/22 Eng 8p

FD: Based on WO9210264

AP: 1991WO-FI00388 19911216; 1992EP-0900876 19911216

DSR: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DE69125193 E 19970417 DW1997-21 B01D-001/22

FD: Based on EP-639097; Based on WO9210264

AP: 1991DE-6025193 19911216; 1991WO-FI00388 19911216; 1992EP-0900876 19911216

ES2100332 T3 19970616 DW1997-31 B01D-001/22

FD: Based on EP-639097

AP: 1992EP-0900876 19911216

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AP: 1991WO-FI00389 19911216; 1993RU-0043874 19911216



NO-301630 B1 19971124 DW1998-03 B01D-001/22

FD: Previous Publ. NO9302177

AP: 1991WO-FI00388 19911216; 1993NO-0002177 19930614

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AP: 1991WO-FI00388 19911216; 1993RU-0044492 19911216

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FD: Previous Publ. HU--66707; Based on WO9210264

AP: 1991WO-FI00388 19911216; 1993HU-0001727 19911216

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AP: 1991WO-FI00388 19911216; 1993US-0075471 19930811; 1996US-0751416 19961118

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FD: Based on WO9210264

AP: 1991WO-FI00388 19911216; 1993RO-0000829 19911216

JP2904582 B2 19990614 DW1999-29 B01D-001/00 6p

FD: Previous Publ. JP6503266; Based on WO9210264

AP: 1991WO-FI00388 19911216; 1992JP-0502093 19911216

CA2098288 C 20001017 DW2000-58 B01D-001/28 Eng

FD: Based on WO9210264

AP: 1991CA-2098288 19911216; 1991WO-FI00388 19911216

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AP: 1991WO-FI00388 19911216; 1993KR-0701758 19930611

Priority Nbr:

1990FI-0006170 19901214

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C02F-001/08 D21C-011/10 F28F-021/06 B01D-001/00 B01D-001/22 B01D-001/28 B01D-003/00 C02F-001/04 F28F-009/02

Basic Abstract:

WO9210264 A

A distn. appts. evaporates and subsequently condenses a liq. It comprises a number of flat bags formed of a thin-film material, e.g. plastic, placed one against the other. The bags serve as heat exchangers between a vaporising liq. flowing along their exterior surfaces and a condensing vapour flowing inside the bags. A compressor increases the temp. and pressure of the generated vapour before it is directed to the inside of the bags. At the upper end of each bag is a honeycomb-structured end strip having the width of the bag and contg. parallel feeding ducts sepd. from each other by partition walls. The ducts distribute the liq. to be evaporated over the entire width of the bag.

The end strip (4) consists of a honeycomb, made from three plastic honeycomb boards. In each





board, the space between opposite walls is divided by transverse, mutually parallel partition walls (24) into parallel ducts of equal width. The ducts in the middle honeycomb form ducts (25) leading to the inside of the bag (3) for the vapour to be condensed. The ducts in the boards on the outside form feeding ducts (26) for the vapour to be condensed. Pref. the ducts (25) are vertical whereas the ducts (26) run obliquely from one end of the strip to the other. The honeycomb strip at the lower end of each bag is similar to that at the upper end. However, the middle board contains ducts (31) which lead obliquely towards the end (30) of the strip and communicate with the ducts (12) seamed inside the bag. These serve as outlet ducts for the condensed liquid. The outer ducts (32) are vertical and serve as outlet ducts for any liquid remaining unvaporized and running down the outside surfaces of the bag.

USE/ADVANTAGE - The appts. produces potable water from sea water. It may also be used to concentrate suspensions, e.g. waste waters from bleaching in pulp mills. Clogging of ducts does not occur. (Dwg.1/6)

Manual Codes:

CPI: D04-A01A D04-B07F F05-A02C J01-A02A

Update Basic:

1992-28

Update Equivalents:

1992-37; 1992-41; 1993-44; 1994-11; 1994-20; 1994-23; 1995-06; 1995-12; 1997-31; 1997-44; 1998-03; 1998-06; 1998-17; 1998-32; 1998-41; 1999-29; 2000-58; 2001-11

Search statement 3